

Blockchain for Sustainable Development Goals 2020

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Universidad De Burgos

Seongbae Lim, Ph.D.
Greehey School of Business
St. Mary's University, USA





What is Blockchain?

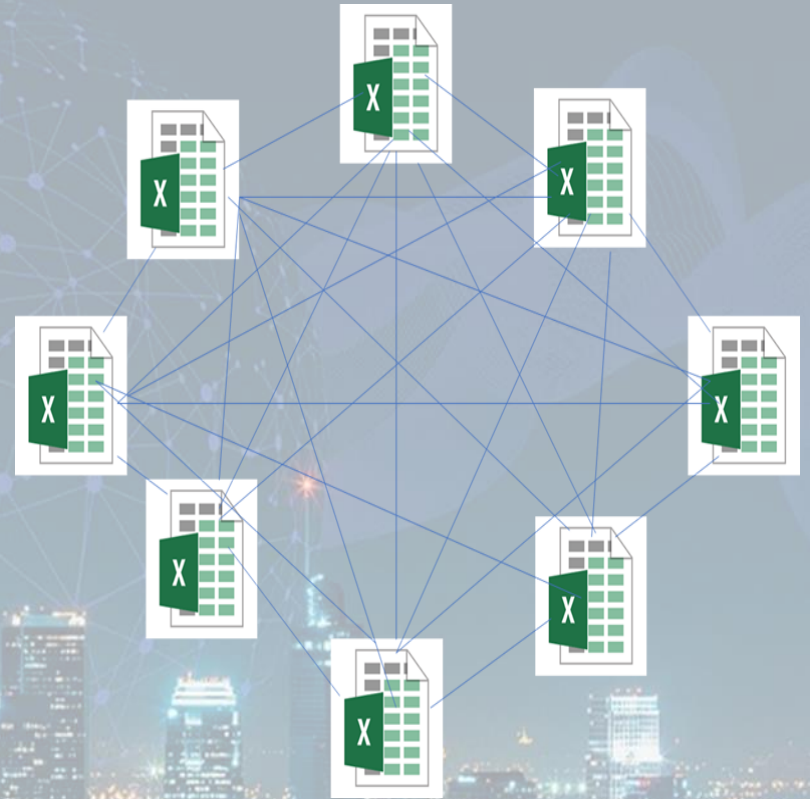


Technologies for Blockchain

- Merkle Trees (1979)
- P2P Communication Protocol (1999)
- Asymmetric Key Encryption (1997)
- Proof of Work (1997)
- Hash Function (2001)

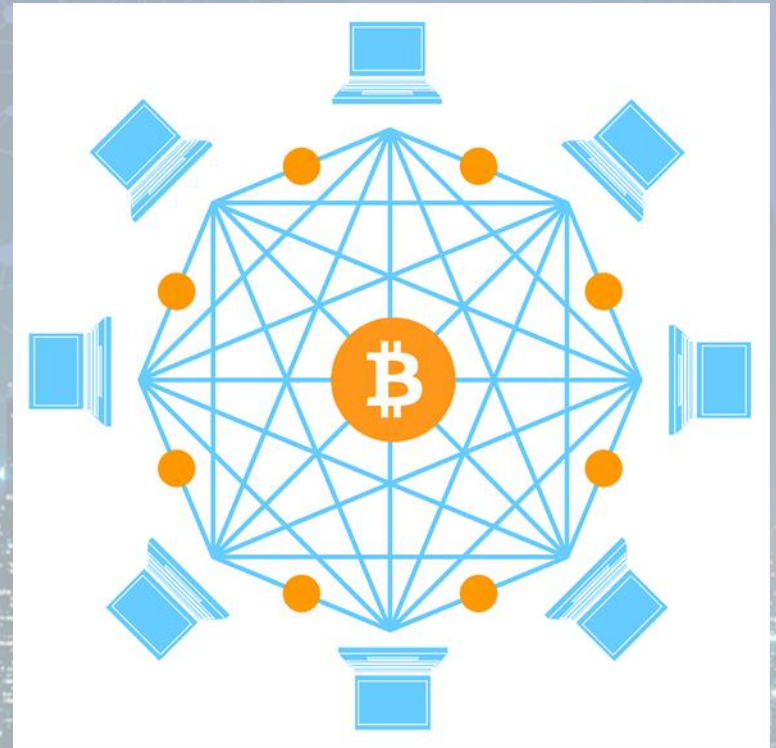
Distributed Ledger

- All nodes in the network share same ledger and periodically synchronize it.



Internet of Value

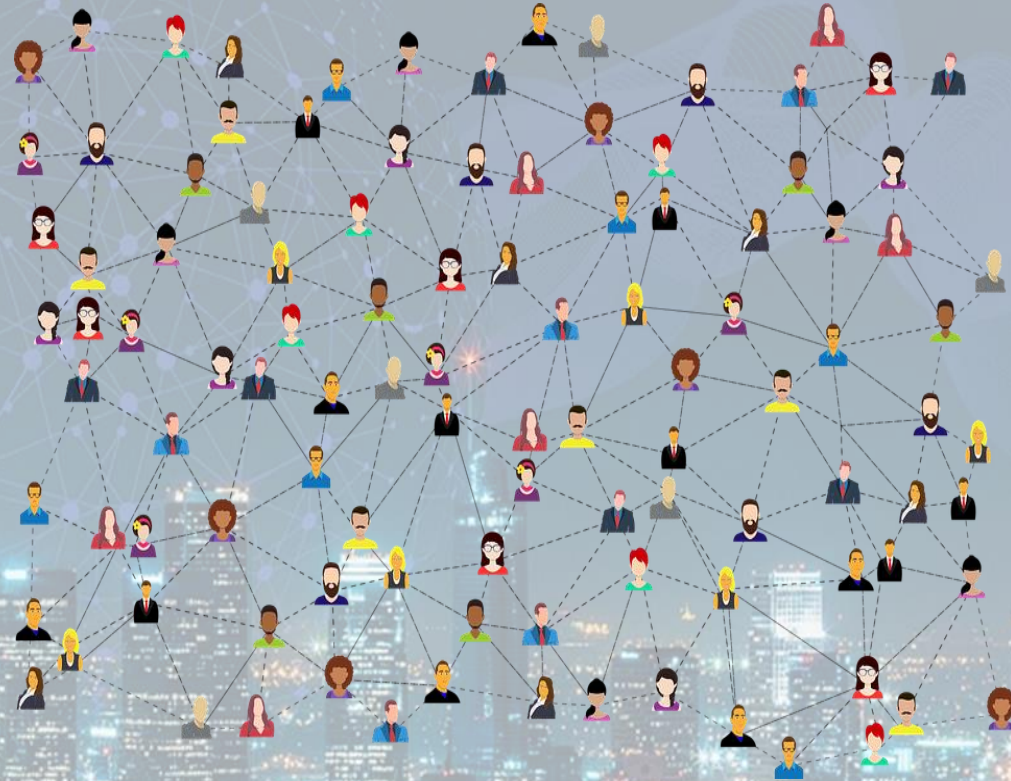
- Internet exchanges Information
- Blockchain exchanges value
 - Product
 - Intellectual Property
 - Money



- Disaster Girl (Zoe Roth)
 - Taken in 2005
 - Sold for \$470,000 on 29 April 2021.
 - Retain 10% of proceeds

P2P Network

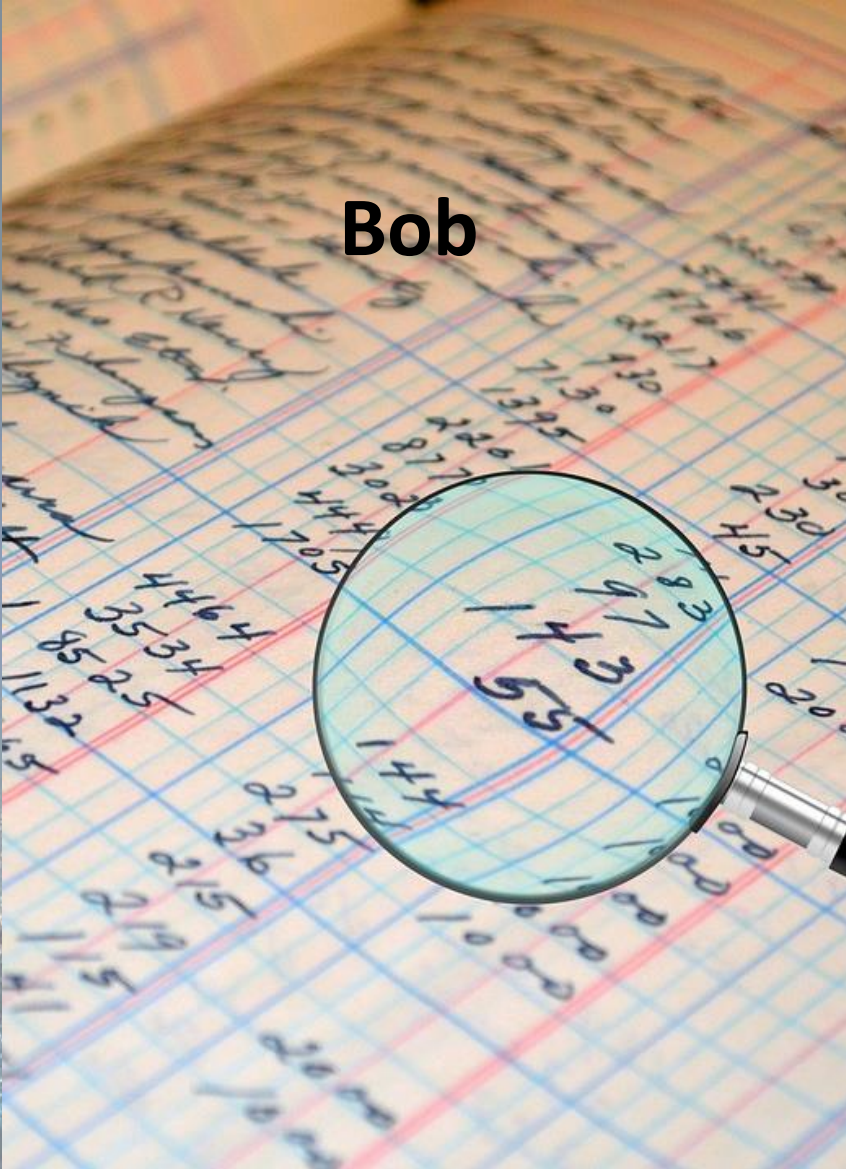
- Autonomous
- No role of a third party at the center such as banks



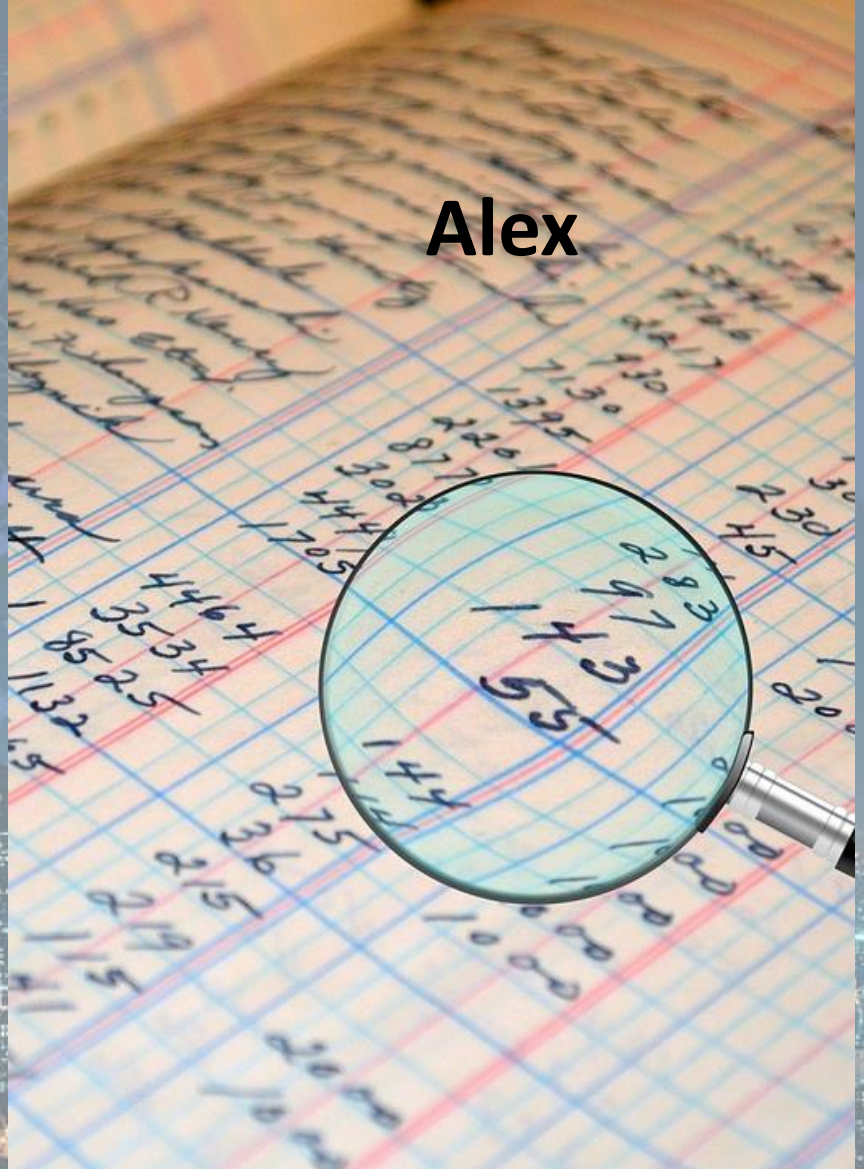
How Does Blockchain Work?



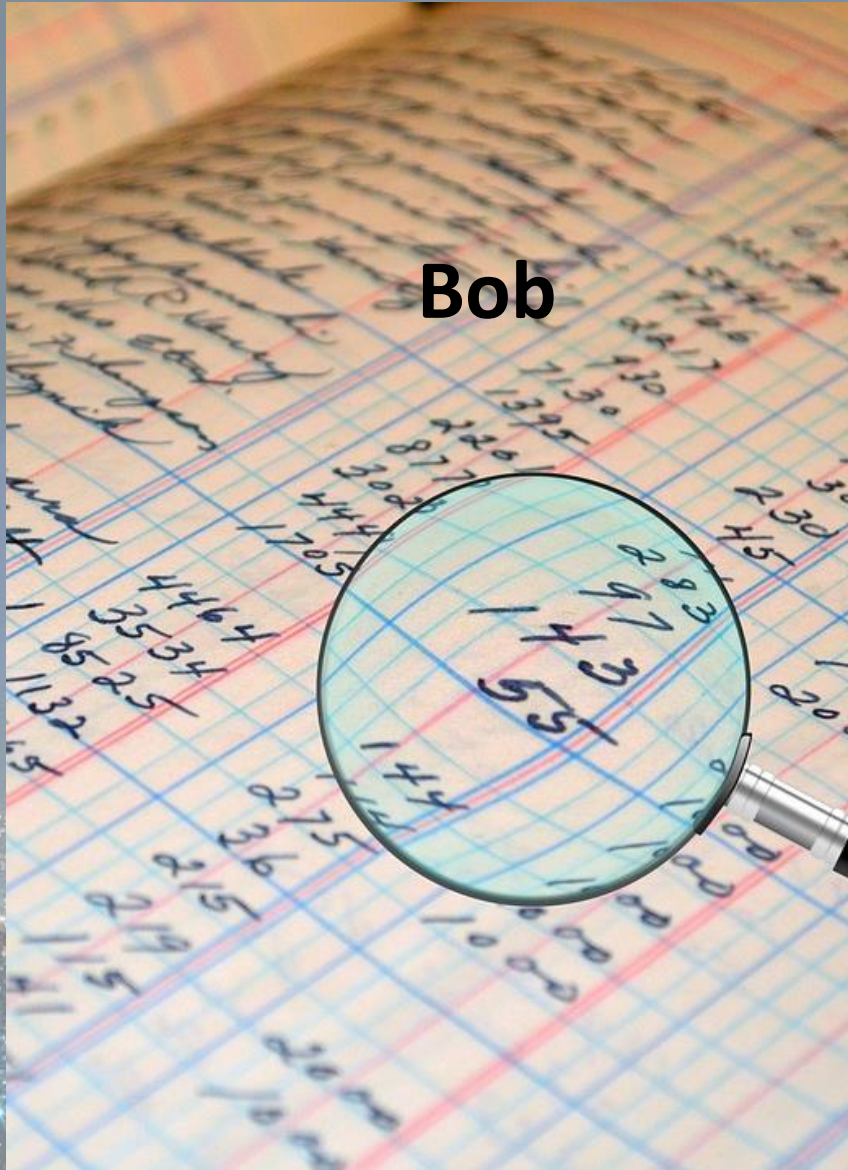
Bob



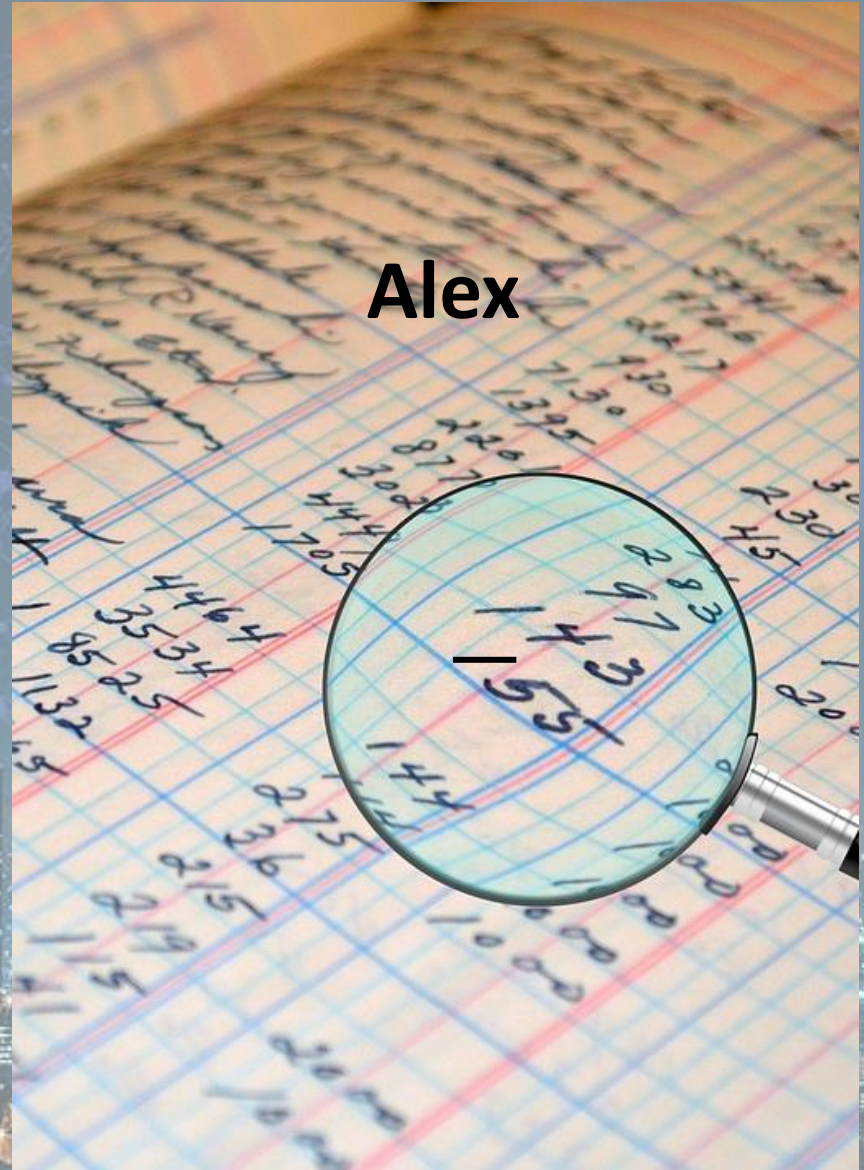
Alex



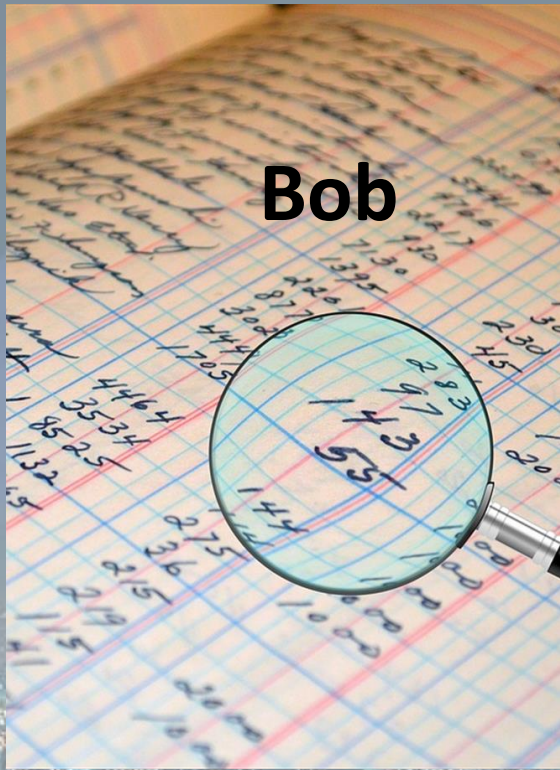
Bob



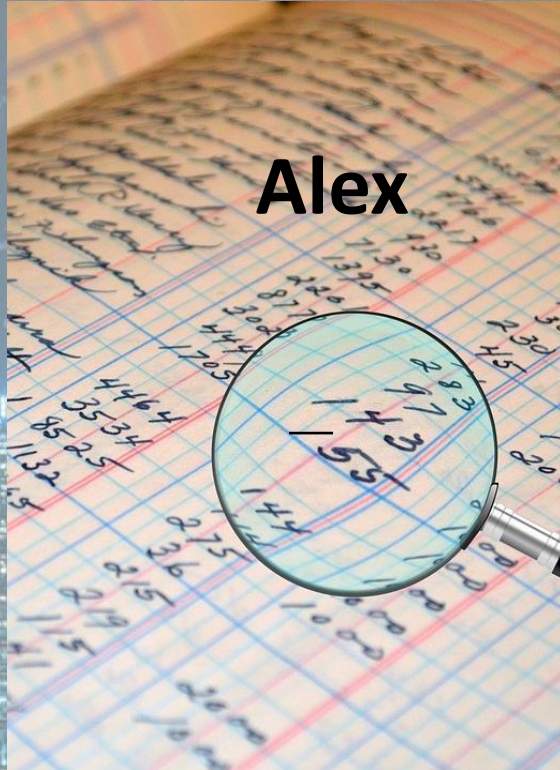
Alex



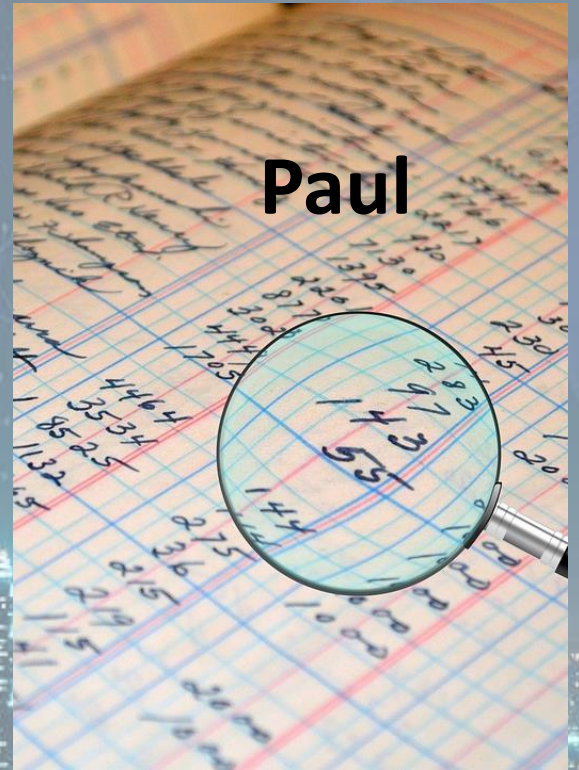
Bob



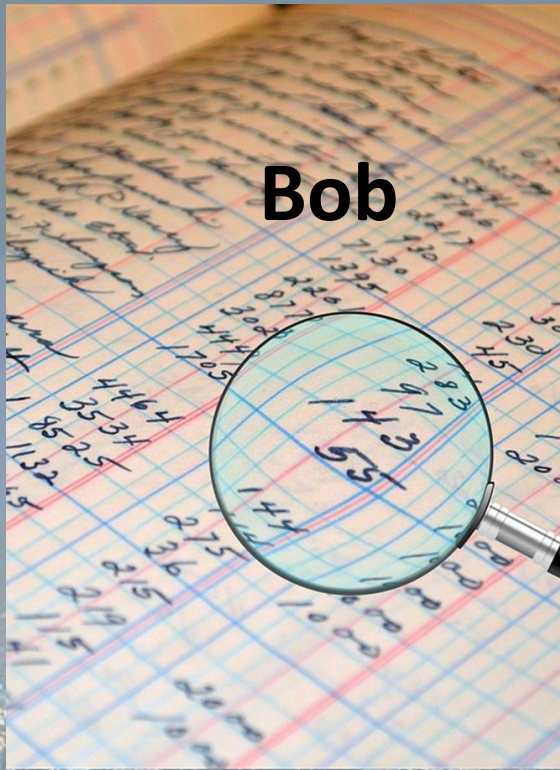
Alex



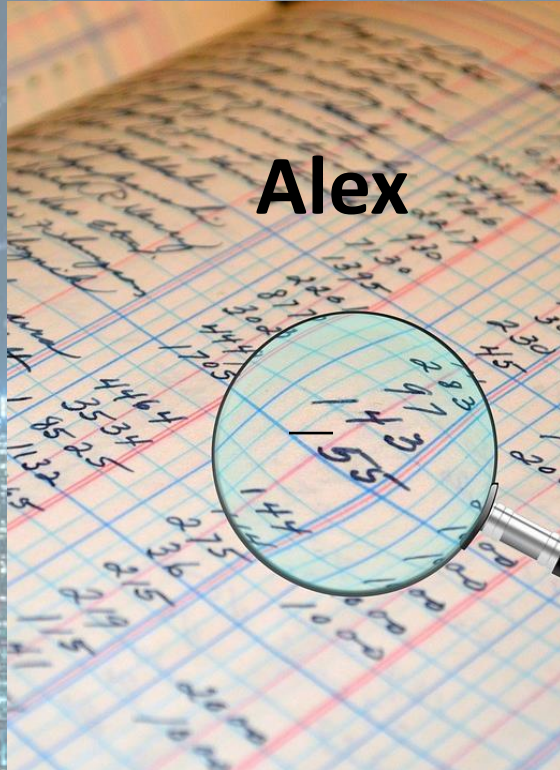
Paul



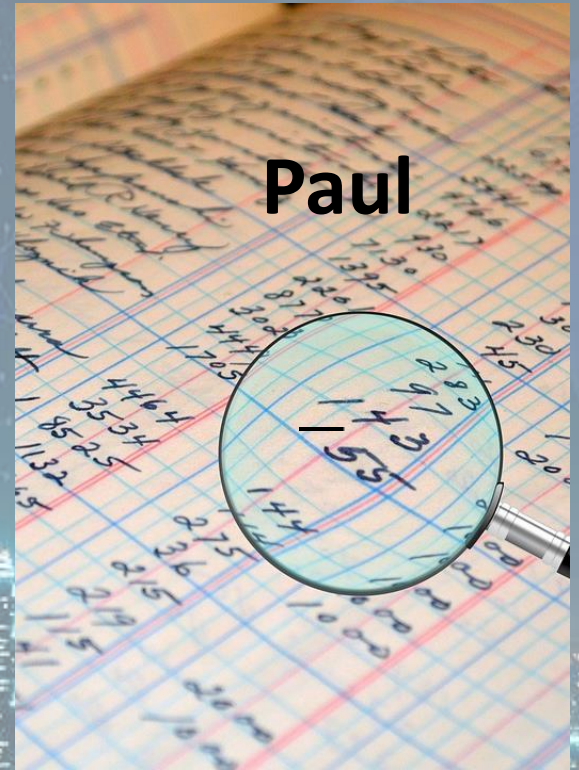
Bob



Alex



Paul



Bob



Alex



Paul



Arthur



Brian



Alicia



The Evolution of Blockchain

Cryptocurrency

- The foundation of blockchain technologies
- Cryptocurrency blockchains
- Peer-to-peer decentralised cryptocurrency transactions
- Proof-of-work (PoW) protocol

BLOCKCHAIN 1.0



Smart Contracts

- More financial functionality than simply being a cryptocurrency transactions processor
- Decentralized applications (DApps) based on programmable language
- Autonomously executing algorithms
- Proof-of-work (PoW) protocol

BLOCKCHAIN 2.0



More Functionality

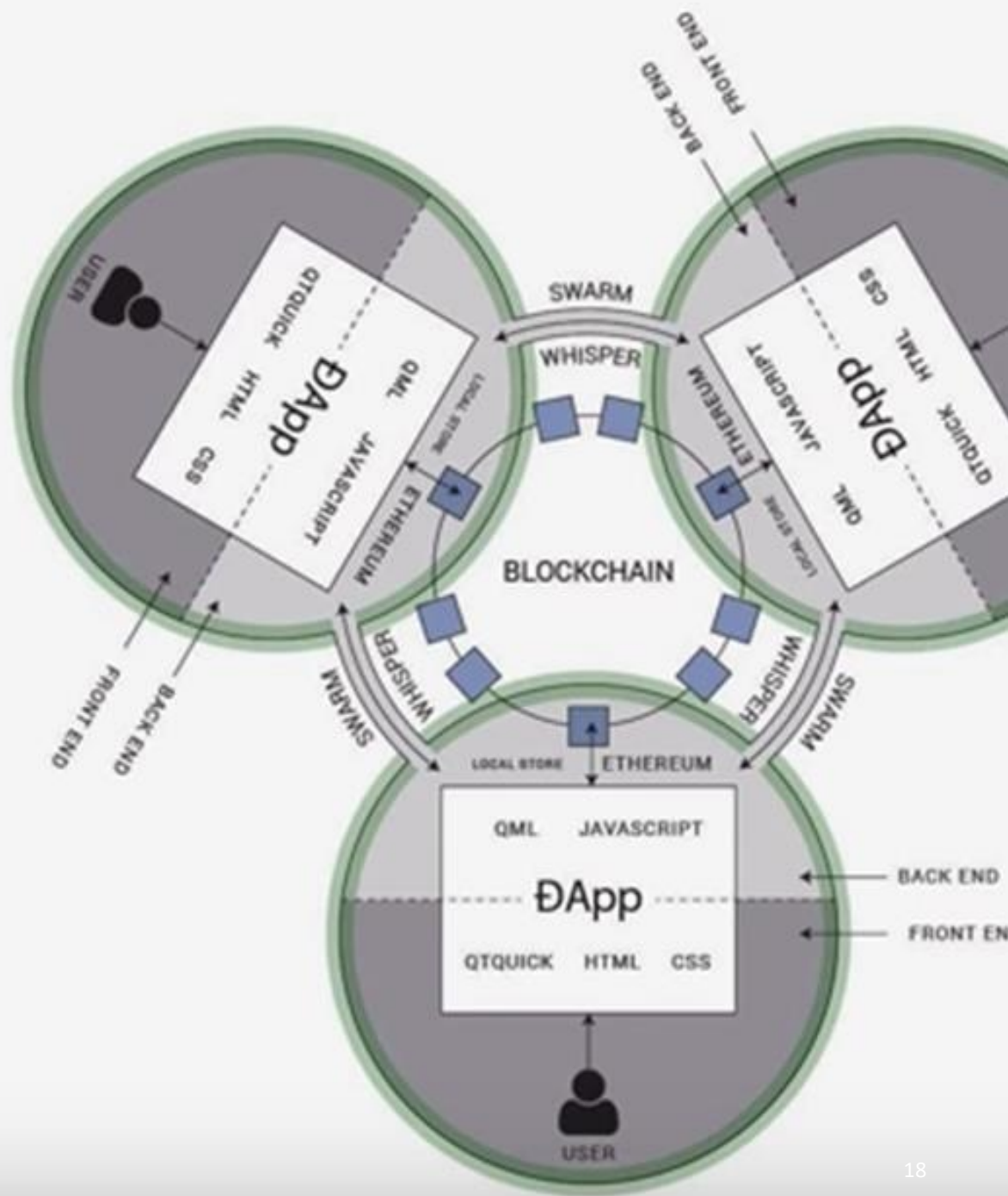
- Larger-scale of applications of non cryptocurrency-related Distributed Ledger Technology (DLT)
- Improved performance with more scalability and interoperability
- Proof-of-stake (PoS) protocol

BLOCKCHAIN 3.0



Source: UNCTAD

Dapp



Ideas for Blockchain Applications

Transparency

Security

Integrity of Data

Democratic Governance Systems

Cost reduction

Token Economy

Fair Wealth Distribution

Identity

Smart Contract

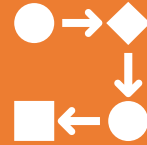
Traceability

Collaboration Efficacy

Distributed Ledger Technology

Triple Ledger Systems

Blockchain



Process



Product/Service



Business Model





Blockchain as a Social Technology

Sustainable Development Goals



Sustainable Development Goals for 2030

- A plan of action for people, planet and prosperity.
- Seeks to strengthen universal peace in larger freedom
- The 17 SDGs define how the global community would work together to tackle poverty, Improve lives and protect the environment



UNITED NATIONS

TRANSFORMING OUR WORLD:



**THE 2030 AGENDA FOR
SUSTAINABLE DEVELOPMENT**



SUSTAINABLE DEVELOPMENT GOALS

1 NO POVERTY

2 ZERO HUNGER

3 GOOD HEALTH AND WELL-BEING

4 QUALITY EDUCATION

5 GENDER EQUALITY

6 CLEAN WATER AND SANITATION

7 AFFORDABLE AND CLEAN ENERGY

8 DECENT WORK AND ECONOMIC GROWTH

9 INDUSTRY, INNOVATION AND INFRASTRUCTURE

10 REDUCED INEQUALITIES

11 SUSTAINABLE CITIES AND COMMUNITIES

12 RESPONSIBLE CONSUMPTION AND PRODUCTION

13 CLIMATE ACTION

14 LIFE BELOW WATER

15 LIFE ON LAND

16 PEACE, JUSTICE AND STRONG INSTITUTIONS

17 PARTNERSHIPS FOR THE GOALS





SDGs for Quality of Life: People



SDGs for Environment: Planet

4 QUALITY
EDUCATION



5 GENDER
EQUALITY



8 DECENT WORK AND
ECONOMIC GROWTH



10 REDUCED
INEQUALITIES



SDGs for Equal Opportunity: Prosperity

9 INDUSTRY, INNOVATION
AND INFRASTRUCTURE



11 SUSTAINABLE CITIES
AND COMMUNITIES



12 RESPONSIBLE
CONSUMPTION
AND PRODUCTION



16 PEACE, JUSTICE
AND STRONG
INSTITUTIONS



17 PARTNERSHIPS
FOR THE GOALS



SDG for Coevolution: Partnership

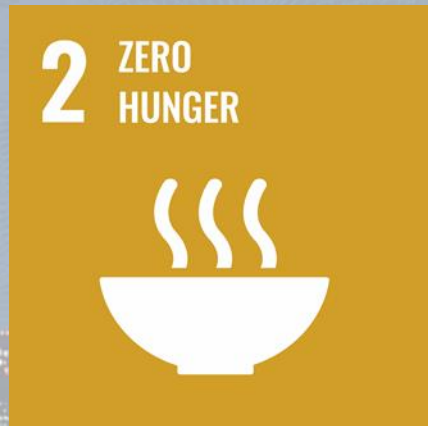
A glowing green padlock is centered on a dark blue background with a complex circuit board pattern. The padlock is illuminated with a bright green light, making it stand out against the darker background. The circuit lines are thin and intricate, creating a sense of digital connectivity and technology.

Blockchain for Sustainable Development Goals

1 NO
POVERTY



**"but with AgriLedger,
I know I can do better"**



BitGive Foundation™

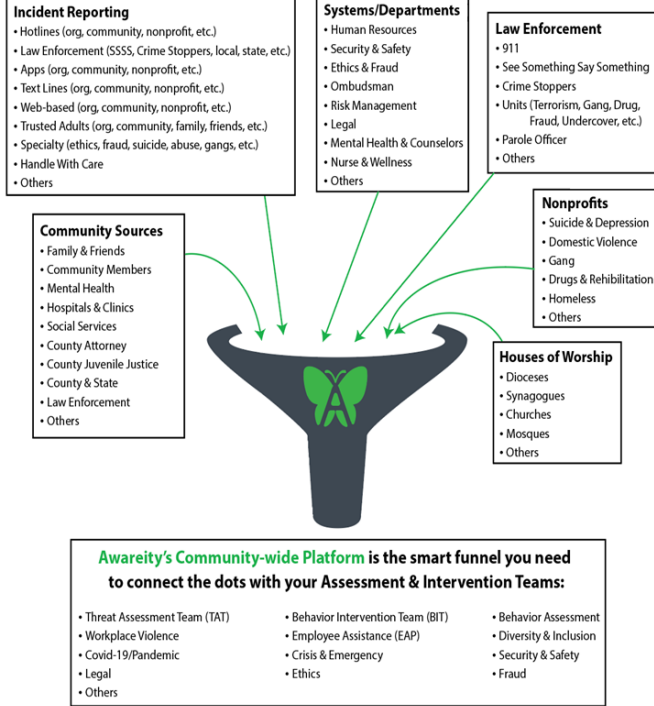
3 GOOD HEALTH
AND WELL-BEING



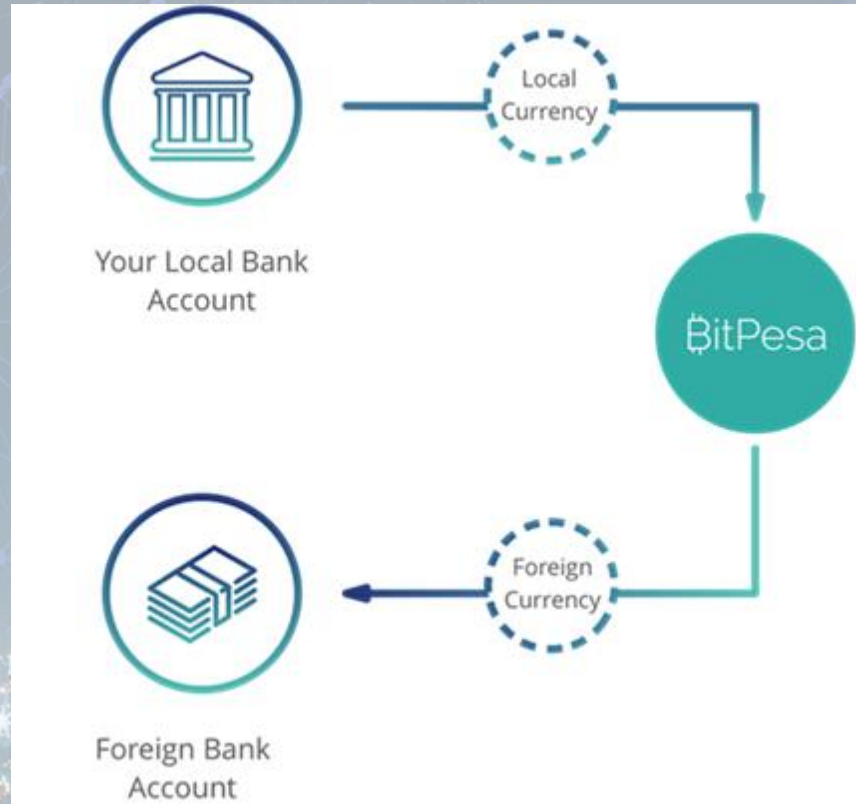
4 QUALITY EDUCATION



Secure Information Collecting, Routing, Sharing, and Accountability



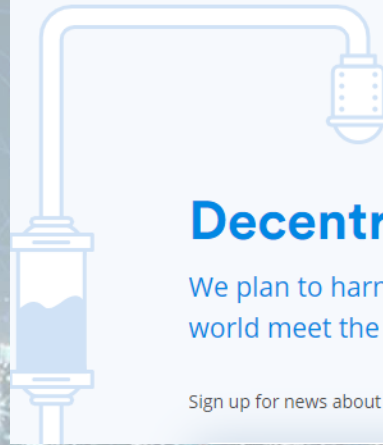
5 GENDER
EQUALITY



6 CLEAN WATER AND SANITATION



WaterChain™

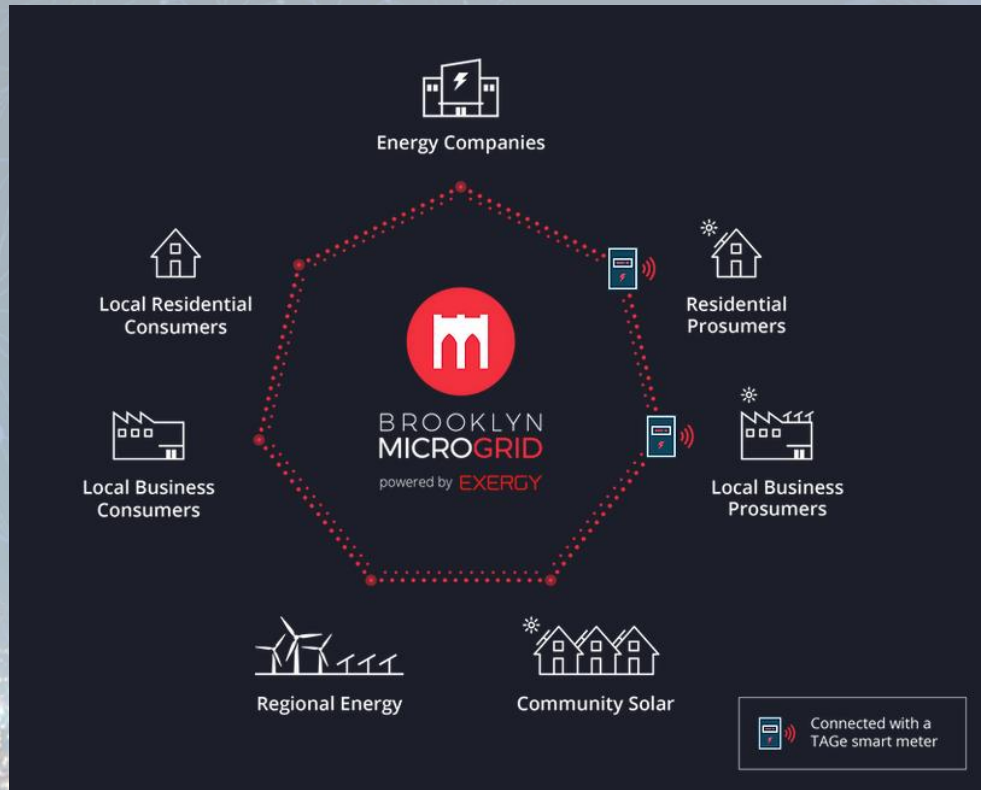


Decentralized Water Funding

We plan to harness the power of crypto capital to help the world meet the growing water crisis.

Sign up for news about our white paper, token sale, and product updates.

7 AFFORDABLE AND CLEAN ENERGY



8 DECENT WORK AND
ECONOMIC GROWTH



9 INDUSTRY, INNOVATION
AND INFRASTRUCTURE



NFT



The Diem Payment System

The Diem global payment system is built on a secure, scalable, and reliable blockchain.



11 SUSTAINABLE CITIES AND COMMUNITIES

A screenshot of the beenest website. The top left features the 'beenest' logo. The top right has links for 'Host', 'Help', and 'Login'. The main heading reads 'Book a home: Connect with the Crypto Community' with the subtext 'Commission-free. Secure. Decentralized.' Below this is a search form with fields for 'Location' (containing 'San Francisco'), 'Check-in' (with a 'Date' placeholder), 'Check-out' (with a 'Date' placeholder), and 'Guests' (with the number '1'). A 'Search Listings' button is on the right. The background of the website is a photograph of colorful Victorian houses in San Francisco.

beenest

Host Help Login

Book a home: Connect with the Crypto Community

Commission-free. Secure. Decentralized.

Location: San Francisco

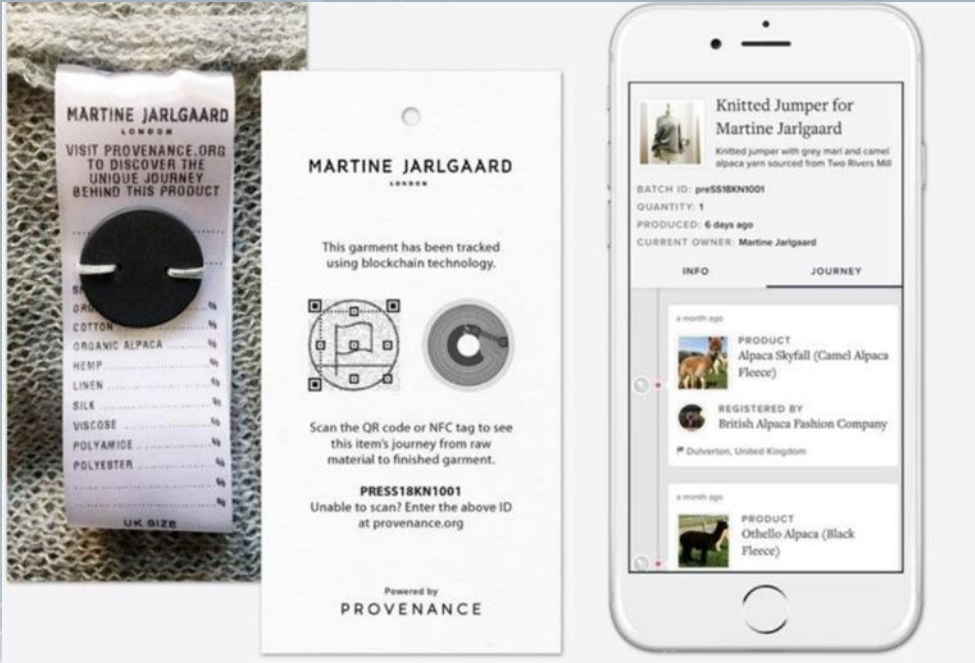

Check-in: Date

Check-out: Date

Guests: 1

Search Listings

12 RESPONSIBLE CONSUMPTION AND PRODUCTION



MARTINE JARLGAARD LONDON
VISIT PROVENANCE.ORG TO DISCOVER THE UNIQUE JOURNEY BEHIND THIS PRODUCT

UK SIZE

MARTINE JARLGAARD LONDON

This garment has been tracked using blockchain technology.

Scan the QR code or NFC tag to see this item's journey from raw material to finished garment.

PRESS18KN1001
Unable to scan? Enter the above ID at provenance.org

Powered by **PROVENANCE**

Knitted Jumper for Martine Jarlgaard
Knitted jumper with grey merino and camel alpaca yarn sourced from Two Rivers Mill

BATCH ID: **press18KN001**
QUANTITY: 1
PRODUCED: 6 days ago
CURRENT OWNER: **Martine Jarlgaard**

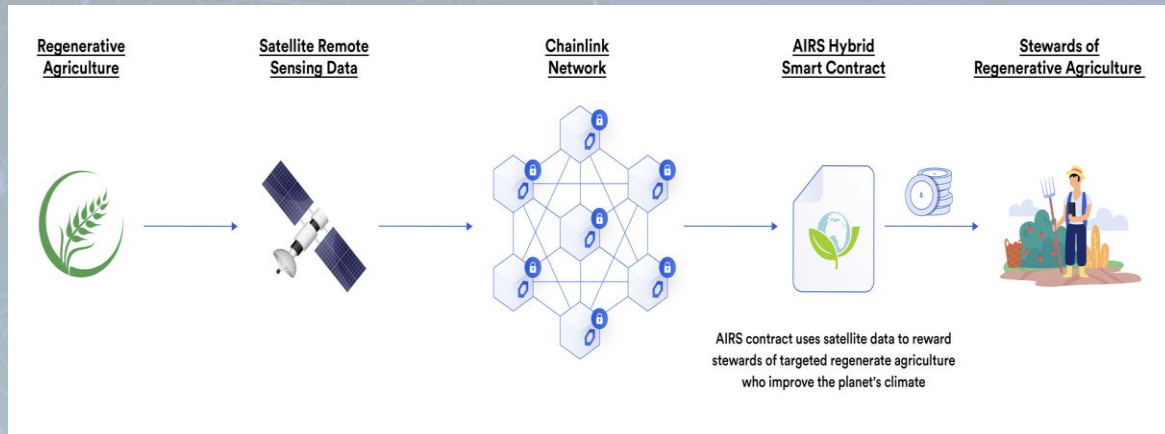
INFO **JOURNEY**

4 month ago
PRODUCT
Alpaca Skyfall (Camel Alpaca Fleece)

REGISTERED BY
British Alpaca Fashion Company
Dulverton, United Kingdom

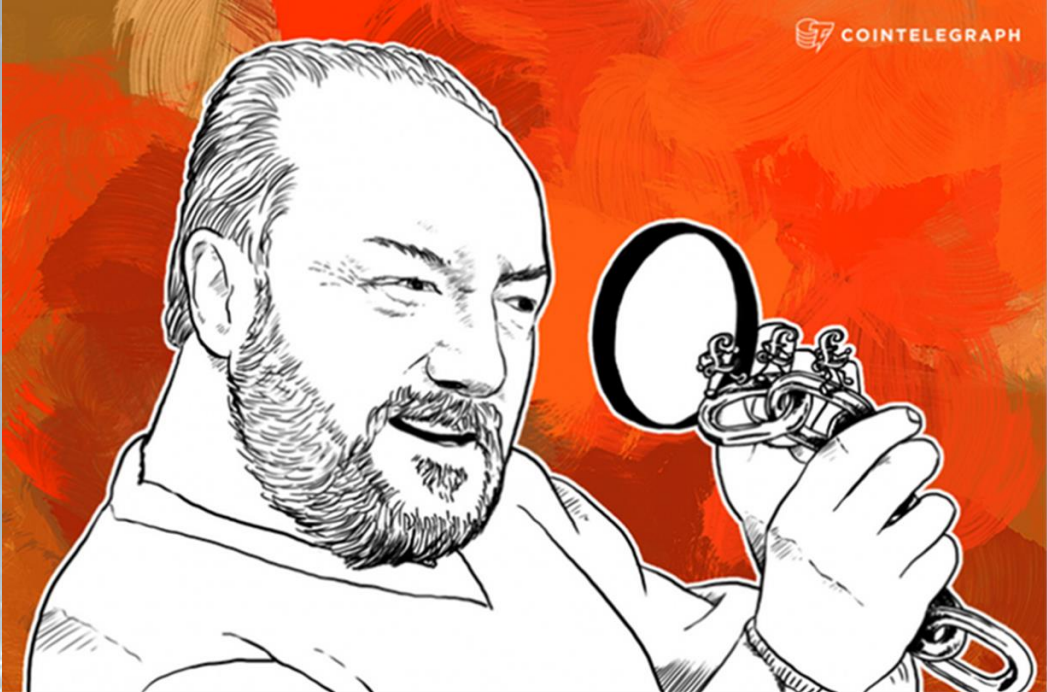
4 month ago
PRODUCT
Othello Alpaca (Black Fleece)

13 CLIMATE ACTION









<https://www.bitcoinmarketinsider.com>

17 PARTNERSHIPS
FOR THE GOALS



MediLedger

-
- slim1@stmarytx.edu

